

## HPNS: Building Radiological Remediation Goals, 1/12/21

### 1. The Dispute

- The Navy says that the current radiological remediation goals for HPNS buildings are protective, relying on risk estimates from the RESRAD BUILD calculator.
- The Navy's RESRAD BUILD analysis is based on favorable inputs and assumptions that we believe are not well supported (e.g., ingestion rate and attenuation of dust).
- BPRG risk estimates are ~1,000 times higher than RESRAD BUILD estimates if default BPRG inputs are used. Most of the difference is in the removable fraction (dust). The Navy dismisses the "default" BPRGs for dust as below background, unmeasurable (in the field), and not providing a "valid representation of risk." We have considered but have been unable to support site-specific assumptions which would modify the BPRGs.

Estimated Risk Associated with Selected HPNS RGs		
	<i>RESRAD BUILD</i>	<i>BPRG</i>
Ra-226	$3.0 \times 10^{-6}$	$8.2 \times 10^{-3}$
Cs-137	$2.4 \times 10^{-5}$	$3.4 \times 10^{-3}$
Th-232	$3.4 \times 10^{-6}$	$1.5 \times 10^{-3}$

### 2. Recent EPA-Navy Correspondence

8/20/20 EPA letter: Indicates lack of support for RESRAD BUILD risk estimates and inability to concur with Navy's protectiveness determination

12/11/20 Navy letter: Asks EPA to reconsider its lack of support for RESRAD BUILD

12/22/20 EPA letter: Asks Navy to further respond to EPA concerns about RESRAD BUILD, and to support claims about background and technical implementability.

1/11/21 Navy letter: Expresses Navy belief that it has addressed EPA's concerns about RESRAD BUILD and dismisses BPRGs as unusable and impractical. Provides example background values to support claim that BPRGs are below background but does not explain their source. Appears to qualify its claim that BPRGs are unmeasurable, indicating they are unmeasurable in the field (i.e., the BPRGs may be measurable in an offsite lab).

### 3. EPA Request to HQ

- Asked for information on two topics: i) other Superfund cleanups where remediation goals have been set for radiologically contaminated buildings intended for residential use; and ii) circumstances in which the BPRG calculator has been used. Also asked that HQ be prepared to discuss the level of conservatism designed into the BPRG calculator.
- Stuart sent out a request to EPA site managers this week asking for information on BPRG use. Awaiting responses.